207 Hemlock Brook Williamstown, MA 01267

April 5, 1986

Professor Joshua Lederberg President Rockefeller University 66th Street and York Avenue New York, NY 10021

Dear Professor Lederberg,



Some years ago, I think it was in 1981, I spoke with you about the reception of Avery, MacLeod, and McCarty's discovery that DNA is the genetic material. At that time you told me about your attempt to duplicate their results using a system involving Neurospora, and you impressed upon me the fact that their work was certainly not unknown and unrecognized. Last summer, as I was reading Dr. McCarty's recent book I thought that perhaps I might have another go at the subject.

Historical investigation of this episode in twentieth century biology always seems to have been designied to answer the question of whether or not the scientific community—or the Rockefeller team itself—recognized the significance of that discovery. (I sometimes think that the reason this question seemed important has nothing to do with the history of science and everything to do with the fact that Avery did not receive a certain scientific award.) In the first half of the enclosed paper, I try to prove that there is every reason to believe that the Rockefeller work was widely appreciated as having the genetic significance our biology textbooks now take for granted.

In the rest of the paper I try to show that in spite of its overwhelming significance it was not immediately clear how to use the knowledge that genes were made of DNA to initiate further chemical investigations of the gene. I argue that acceptance of Avery's discovery did not help scientists decide what to DO next, and so it did not function as a paradigm in one of Kuhn's senses. Using a musical metaphor: Avery, MacLeod and McCarty are part of the slow introduction to the mighty symphony which is molecular genetics.

If in your very busy life you could find the time to glance at this piece of mine, I would be honored. I have also

sent a copy to Dr. McCarty. If you are too tied up with other things I will certainly understand.

I think it was Dr. Johnson who said that praise is the tribute a man is expected to pay for the grant of perusing a manuscript. I am not writing in hope of exacting the price of praise, but in hope of receiving a smaller sum: criticism.

Yours sincerely,

Gordon C. F. Bearn

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